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LOGINID: SSSPTA1626GMS

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 4 AUG 11 STN AnaVist workshops to be held in North America

NEWS 5 AUG 30 CA/CAplus -Increased access to 19th century research documents

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NEWS 7 SEP 09 ACD predicted properties enhanced in REGISTRY/ZREGISTRY

NEWS 8 OCT 03 MATHDI removed from STN

NEWS 9 OCT 04 CA/CAplus-Canadian Intellectual Property Office (CIPO) added to core patent offices

NEWS 10 OCT 06 STN AnaVist workshops to be held in North America

NEWS 11 OCT 13 New CAS Information Use Policies Effective October 17, 2005

NEWS 12 OCT 17 STN(R) AnaVist(TM), Version 1.01, allows the export/download of CAplus documents for use in third-party analysis and visualization tools

NEWS 13 OCT 27 Free KWIC format extended in full-text databases

NEWS 14 OCT 27 DIOGENES content streamlined

NEWS 15 OCT 27 EPFULL enhanced with additional content

NEWS EXPRESS JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005

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*PROMT - PROMT from 1978 - present

10691628.trn Page 1

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FILE 'HOME' ENTERED AT 14:41:25 ON 30 OCT 2005

=> Uploading

THIS COMMAND NOT AVAILABLE IN THE CURRENT FILE Do you want to switch to the Registry File? Choice (Y/n):

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Some commands only work in certain files. For example, the EXPAND command can only be used to look at the index in a file which has an index. Enter "HELP COMMANDS" at an arrow prompt (=>) for a list of commands which can be used in this file.

=> FILE REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 14:41:40 ON 30 OCT 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 OCT 2005 HIGHEST RN 866391-97-1 DICTIONARY FILE UPDATES: 28 OCT 2005 HIGHEST RN 866391-97-1

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting ${\tt SmartSELECT}$ searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

Uploading C:\Program Files\Stnexp\Queries\10691628.str

chain nodes : 23 24 25 26 27

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

chain bonds :

5-11 6-23 9-26 14-27 19-24 23-24 24-25

ring bonds :

 $1-2 \quad 1-7 \quad 2-3 \quad 3-4 \quad 4-8 \quad 5-6 \quad 5-9 \quad 6-7 \quad 7-8 \quad 8-9 \quad 10-11 \cdot \ 10-15 \quad 11-12 \quad 12-13 \quad 13-14$

14-15 16-17 16-21 17-18 18-19 19-20 20-21

exact/norm bonds :

5-6 5-9 5-11 6-7 6-23 8-9 9-26 14-27 16-17 16-21 17-18 18-19 19-20

19-24 20-21 23-24 24-25

normalized bonds :

1-2 1-7 2-3 3-4 4-8 7-8 10-11 10-15 11-12 12-13 13-14 14-15

isolated ring systems :

containing 1 : 10 : 16 :

G1:0,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom

11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom

20:Atom 21:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

10691628.trn

Page 3

L1

STR

Structure attributes must be viewed using STN Express query preparation.

=> s l1

SAMPLE SEARCH INITIATED 14:41:56 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED

2 ITERATIONS

2 ANSWERS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **COMPLETE**

BATCH

COMPLETE

PROJECTED ITERATIONS:

2 TO 124

PROJECTED ANSWERS:

2 TO 124

2 SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 14:42:03 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED -

54 TO ITERATE

100.0% PROCESSED

SEARCH TIME: 00.00.01

54 ITERATIONS

L3

53 SEA SSS FUL L1

=> FIL HCAPLUS

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

53 ANSWERS

10691628.trn

Page 4

FULL ESTIMATED COST

ENTRY SESSION 161.33 161.54

FILE 'HCAPLUS' ENTERED AT 14:42:12 ON 30 OCT 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 30 Oct 2005 VOL 143 ISS 19 FILE LAST UPDATED: 28 Oct 2005 (20051028/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 13

L4 571 L3

=> s l4 and diseases

219553 DISEASES

1 DISEASESES

219554 DISEASES

(DISEASES OR DISEASESES)

6 L4 AND DISEASES

=> s 14 and p/dt

5029807 P/DT

L6 69 L4 AND P/DT

=> s 16 and us/pc

1482501 US/PC

L7 44 L6 AND US/PC

=> s 17 and py< \approx 2002

22790215 PY<=2002

L8 23 L7 AND PY<=2002

=> d 15 ibib abs hitstr tot

L5 ANSWER 1 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2005:349001 HCAPLUS

DOCUMENT NUMBER: 142:386016

TITLE: Use of N-desmethylclozapine to treat human

neuropsychiatric disease

INVENTOR(S): Weiner, David M.; Brann, Mark R.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 34 pp., Cont.-in-part of U.S.

10691628.trn

Page 5

10/30/2005

10691628.trn

Ser. No. 761,787. CODEN: USXXCO

DOCUMENT TYPE:

Patent English

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
				-	
US 2005085463	A1	20050421	US 2004-913117		20040805
US 2004224942	A1	2004141	US 2004-761787		20040121
PRIORITY APPLN. INFO.:			US 2003-442690P	P	20030123
	,		US 2004-761787	A2	20040121

AB Disclosed herein is a method to treat neuropsychiatric diseases including psychosis, affective disorders, dementia, neuropathic pain, and glaucoma. Treatment is carried out by administering a therapeutically effective amount of N-desmethylclozapine to a patient suffering from a neuropsychiatric disease.

IT 43200-80-2, Zopiclone

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(use of N-desmethylclozapine to treat human neuropsychiatric disease)

43200-80-2 HCAPLUS RN

1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-CN dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:68108 HCAPLUS

DOCUMENT NUMBER: 140:139351

TITLE: Psychotropic drugs and fatal pulmonary embolism AUTHOR (S): Parkin, Lianne; Skegg, David C. G.; Herbison, G.

Peter; Paul, Charlotte

CORPORATE SOURCE: Department of Preventive and Social Medicine,

University of Otago, Dunedin, N. Z.

SOURCE: Pharmacoepidemiology and Drug Safety 12(8)

647-652

CODEN: PDSAEA; ISSN: 1053-8569

PUBLISHER: John Wiley & Sons Ltd.

DOCUMENT TYPE: Journal LANGUAGE: English

Purpose: To examine the association between the use of psychotropic drugs and fatal pulmonary embolism. Methods: We conducted a national case-control study of fatal pulmonary embolism. Cases were 75 New Zealand men and women aged 15 - 59 yr who died between 1 Jan. 1990 and 31 Dec. 1998, where the underlying cause of death was certified as codes 415.1, 451 or 453 of the International Classification of Diseases (9th Revision). Four controls, matched for sex and age, were selected from the general practice to which each case had belonged. Information was abstracted from the records of general practitioners, family planning clinics and

psychiatric services. Odds ratios and 95% confidence intervals (95% CI) were estimated using conditional logistic regression. The key analyses were restricted to cases (n = 62) and controls (n = 243) without major risk factors for venous thromboembolism. Results: Compared to non-use, the adjusted odds ratio for current use of antipsychotic drugs was 13.3 (95% CI: 2.3 - 76.3). Low potency antipsychotics appeared to carry the highest risk (odds ratio: 20.8 [95% CI: 1.7 - 259.0]). The main drug involved was thioridazine. The odds ratio for current use of antidepressants was also increased, at 4.9 (95% CI: 1.1 - 22.5). Conclusions: Our results for conventional antipsychotics are consistent with previous studies of non-fatal venous thromboembolism. The finding for antidepressants needs to be replicated in other studies.

IΤ 43200-80-2, Zopiclone

> RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(psychotropic drugs and fatal pulmonary embolism risk)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

. THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS 16 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN L_5

ACCESSION NUMBER:

2003:980068 HCAPLUS 140:230874

DOCUMENT NUMBER: TITLE:

Dependence on legal psychotropic drugs among

alcoholics

AUTHOR (S):

Johansson, Bjoern Axel; Berglund, Mats; Hanson, Maria;

Poehlen, Christina; Persson, Ingrid

CORPORATE SOURCE:

Department of Clinical Alcohol Research, Malmoe University Hospital, Lund University, Lund, Swed.

SOURCE: Alcohol and Alcoholism (Oxford, United Kingdom)

(2003), 38(6), 613-618 CODEN: ALALDD; ISSN: 0735-0414

Oxford University Press

DOCUMENT TYPE:

Journal English

PUBLISHER: LANGUAGE:

Dependence on legal psychotropic drugs (PTD) was reported to have increased in alcoholics, but previous studies report conflicting results concerning the rate of increase and clin. characteristics. The aim of the present study was first, to assess the dependence rate of PTD among alcoholics in open and institutionalized care, and to compare these populations with the general population, and second, to assess rates and doses of high- and low-dose PTD-dependence among alcoholics. In 1997, alcoholics in open and institutionalized care were asked to anonymously fill in a questionnaire on their drug use and dependence. Healthy controls were included. The number of attending subjects was 130 open-care alcoholics at the Department of Alc. and Drug Diseases in

Malmoe, Sweden; 23 alcoholics in institutionalized care at Karlsvik

Rehabilitation Center in Hoeoer, Sweden; and 120 healthy controls at Vardcentralen Kirseberg, a primary health care center located in a Malmoe area. The approx. attendance rate was 75, 70 and 95%, resp. The questionnaire was based on DSM-IV criteria for dependence. The total rate of PTD-dependent alcoholics was higher in the institutionalized group (35%) than in the open-care setting (14%): difference in proportions (p1-p2 21%; 95% CI: 1%, 41%). Alcoholics were more often PTD-dependent (17%) than were healthy controls (2%), (p1-p2 15%; 95% CI: 9%, 21%). Benzodiazepines (BZD) were the most common PTD. Only four out of a total of 23 BZD-dependent alcoholics developed high-dose BZD-dependence. Those subjects were also misusing other drugs, including cannabis. The authors conclude that alcoholism is associated with legal PTD-dependence and illegal drug misuse. High-dose BZD-dependence is infrequent among BZD-dependent alcoholics.

IT 43200-80-2, Zopiclone

RL: ADV (Adverse effect, including toxicity); BIOL (Biological study) (alcoholism associated with dependence on legal psychotropic drugs and illegal drug misuse)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

, morter

L5 ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE:

INVENTOR(S):

2000:824111 HCAPLUS

134:9361

Methods of making and using N-desmethylzopiclone Jerussi, Thomas P.; Senanayake, Chrisantha H.; Rubin,

Paul D.; Hong, Yaping; Bakale, Roger A.; Xiang,

Tingjian, McConville, Fran A.

PATENT ASSIGNEE(S):

SOURCE:

Sepracor Inc., USA

PCT Int. Appl., 44 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

r: 1

PATENT INFORMATION:

PATENT NO.				KIN	D 1	DATE		APPLICATION NO.						DATE			
						وتستوي											
WO 2000	0694	42		A1		2000	1123	1	WO 2	000-1	US12	820		20000511			
W:	ΑE,	AG,	AL,	AM,	AT,	"AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	CA,	CH,	CN,	CR,	
	CU,	CZ,	DE,	DK,	DM,	DZ,	EE,	ES,	FI,	GB,	GD,	GE,	GH,	GM,	HR,	HU,	
	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,	LU,	
	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,	
	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,	
	AM,	ΑZ,	BY,	KG,	ΚZ,	MD,	RU,	TJ,	TM								
RW:	GH,	GM,	KΕ,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	DE,	

		IT, LU, MC, NL, PT, SE,	BF, BJ, CF,
		MR, NE, SN, TD, TG	20000412
	B1 20020115	US 2000-548607	20000413
		CA 2000-2373797	
EP 1183030		EP 2000-930565	
		GB, GR, IT, LI, LU, NL,	SE, MC, PT,
IE, SI, LT, L			
TR 200200260			20000511
BR 2000010573			20000511
JP 2002544232			20000511
	A 20040430		
	B2 20040819		
	A1 20020214		20010611
US 6506753			
NO 2001005542	A 20020114	NO 2001-5542	20011113
170	A 20021114	ZA 2001-9383	20011114
Q US 6458791	B2 20021001	US 2002-40475	20020109
7 US 2002143016	A1 20021003	·	
US 2003119841	A1 20030626	US 2002-259851	20020930
US 2003166657	A1 20030904	US 2003-340957	20030113
US 6946464 I	B2 20050920		
PRIORITY APPLN. INFO.:		US 1999-134239P	19990514
·		US 1999-135037P	
		US 2000-548607 A	20000413
•		WO 2000-US12820 W	20000511
	,	US 2001-877103 F	3 20010611
		US 2002-40475	3 20020109

AB The invention is directed to compns. comprising, and methods of using, racemic N-desmethylzopiclone, optically pure (+)-N-desmethylzopiclone, and optically pure (-)-N-desmethylzopiclone in the treatment and prevention of diseases and conditions in mammals. The invention is further directed to novel methods of preparing N-desmethylzopiclone, optically pure (+)-N-desmethylzopiclone, and optically pure (-)-N-desmethylzopiclone. The compds. are administered to patients suffering from, anxiety, convulsions, depression, behavioral disorders, sleep disorders, etc.

IT 59878-63-6P, N-Desmethylzopiclone 151776-26-0P,

(+)-N-Desmethylzopiclone 151776-27-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(N-desmethylzopiclone for treatment of anxiety and convulsions and other disorders)

RN 59878-63-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RN 151776-26-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 151776-27-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, (5R)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 300701-71-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-desmethylzopiclone for treatment of anxiety and convulsions and other disorders)

RN 300701-71-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● HCl

IT

43200-80-2, Zopiclone 138680-08-7, (-)-Zopiclone RL: RCT (Reactant); RACT (Reactant or reagent)

(preparation of N-desmethylzopiclone for treatment of anxiety and convulsions and other disorders)

RN 43200-80-2 HCAPLUS

1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-CN dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RN 138680-08-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5R)-6-(5-chloro-2-pyridinyl)-6,7dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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Page 11

IT 138729-47-2P, (+)-Zopiclone 308086-45-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-desmethylzopiclone for treatment of anxiety and convulsions and other disorders)

RN 138729-47-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 308086-45-5 HCAPLUS

CN Butanedioic acid, hydroxy-, (2R)-, compd. with (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl 4-methyl-1-piperazinecarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 138729-47-2 CMF C17 H17 C1 N6 O3

Absolute stereochemistry. Rotation (+).

CM 2

CRN 636-61-3 CMF C4 H6 O5

Absolute stereochemistry.

$$HO_2C$$
 R CO_2H OH

REFERENCE COUNT:

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1998:359090 HCAPLUS

DOCUMENT NUMBER: 129:75732

DOCUMENT NUMBER: 129:75/32

TITLE: The efficacy and safety of zopiclone as an hypnotic

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

AUTHOR(S): Ruther, E.; Parnham, M. J.

3

CORPORATE SOURCE: Psychiatric Clinic, Georg August University,

Gottingen, D-37075, Germany

SOURCE: Reviews in Contemporary Pharmacotherapy (1998), 9(2),

109-121

CODEN: RCPHFW; ISSN: 0954-8602

PUBLISHER: Marius Press

DOCUMENT TYPE: Journal; General Review

LANGUAGE: English

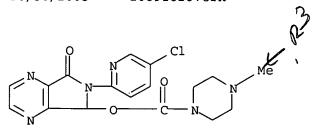
Zopiclone is an effective hypnotic in sleep disorders of various etiologies, with dose-related effects. It shortens sleep onset latency, prolongs deep sleep and reduces the incidence of nocturnal awakenings. Although zopiclone does not prolong the duration of sleep to the same extent as long-acting benzodiazepines, such as flurazepam, its use is associated with better daytime wakefulness and psychomotor performance than are seen during benzodiazepine treatment, mainly as a consequence of its short half-life. For this reason, it has advantages over several benzodiazepines for the treatment of chronic insomnia. In large comparative studies, zopiclone proved to be at least as effective as benzodiazepines. The recommended dose of zopiclone is 7.5 mg. In elderly patient populations, a starting dose of 3.75 mg zopiclone is advisable, but most elderly patients tolerate the 7.5 mg dose, which is usually more effective. An advantage of zopiclone over other hypnotics is that it does not impair respiratory function in patients with mild-to-moderate sleep apnea or airways diseases. It cannot, though, be administered to patients with severe sleep apnea. The safety and tolerability of zopiclone is at least comparable to that of benzodiazepines. The main adverse reactions are bitter taste and dry mouth. Serious adverse reactions are rare. Drowsiness, lack of coordination and concentration difficulties arise in a small percentage of cases. A review with many

IT 43200-80-2, Zopiclone

RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (efficacy and safety of zopiclone as hypnotic)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT:

83 THERE ARE 83 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1993:463060 HCAPLUS

DOCUMENT NUMBER:

119:63060

TITLE:

Treating sleep disorders, convulsive seizure, and

other disorders using optically pure (-)-zopiclone

INVENTOR (S):

Young, James W.; Brandt, Steven

PATENT ASSIGNEE(S): SOURCE:

Sepracor, Inc., USA PCT Int. Appl., 41 pp.

DOORCH.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE			
WO 9310788	A1 19930610	WO 1992-US10705	19921201			
W: AU, BB, BG,	BR, CA, CS, FI, H	U, JP, KR, LK, MG, MN,	MW, NO, NZ,			
PL, RO, RU,						
RW: AT, BE, CH,	DE, DK, ES, FR, G	B, GR, IE, IT, LU, MC,	NL, PT, SE,			
		N, ML, MR, SN, TD, TG	, , ,			
AU 9332759 ·	A1 19930628	AU 1993-32759	19921201			
PRIORITY APPLN. INFO.:		US 1991-801313	A 19911202			
		WO 1992-US10705	A 19921201			
AB $(-)$ -Zoniclone (I) is	s a drug for treat	ment of gleen digorder	e and			

- AB (-)-Zopiclone (I) is a drug for treatment of sleep disorders and convulsive disorders. I is free of the side effects of (±)-zopiclone. I is also useful for treating disorders affected by the agonist binding to central nervous system benzodiazepine receptors, such as anxiety and aggressive behavior.
- IT 138680-08-7, (-)-Zopiclone

RL: BIOL (Biological study)

(epilepsy and insomnia treatment by)

RN 138680-08-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5R)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

=> d 18 ibib abs hitstr tot

L8 ANSWER 1 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2003:319255 HCAPLUS

DOCUMENT NUMBER:

138:343854

TITLE:

Buccal sprays or capsules containing drugs for treating disorders of the central nervous system

INVENTOR(S):

Dugger, Harry A.

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 17 pp., Cont.-in-part of U.S.

Ser. No. 537,118.

CODEN: USXXCO

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT: 19

PATENT INFORMATION:

PAT	PATENT NO.				KIN				APPLICATION NO.						DATE				
	2003 9916				A1					US 2	002-	2300	60				829 < 001 <		
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EP	1036							0920		EP 2	000-	1093	57		1	9971	001 <		
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	2497						2004									0030	327		
	2004								. 1	WO 2	003-1	JS268	847		2	00308	327		
WO		4035021 A3 2004111 AE, AG, AL, AM, AT, AU, A2																	
	W :																		
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Page 15

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               LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,
                PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
               TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW
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                                       20050615
      EP 1539106
                               A2
                                                    EP 2003-796314
                                                                                  20030827
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      US 2004141923
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                                       20041230
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      US 2005163719
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                                       20050728
                                                     US 2003-671709
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      US 2004120895
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                                       20040624
                                                     US 2003-726585
                                                                                  20031204 <--
      US 2005002867
                               A'1
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                                                     US 2004-834815
                                                                                  20040427 <--
PRIORITY APPLN. INFO.:
                                                     WO 1997-US17899
                                                                              A2 19971001
                                                     US 2000-537118
                                                                              A2 20000329
                                                     EP 1997-911621
                                                                              A3 19971001
                                                     US 2002-230060
                                                                                  20020829
                                                                              Α
                                                     WO 2003-US26847
                                                                              W
                                                                                  20030827
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AB Buccal aerosol sprays or capsules using polar and non-polar solvent have now been developed which provide biol. active compds. for rapid absorption through the oral mucosa, resulting in fast onset of effect. The buccal polar compns. of the invention comprise formulation A: aqueous polar solvent, active compound, and optional flavoring agent; formulation B: aqueous polar solvent, active compound, optionally flavoring agent, and propellant; formulation C: non-polar solvent, active compound, and optional flavoring agent; and formulation D: non-polar solvent, active compound, optional flavoring agent, and propellant. Thus, a lingual spray contained sumatriptan succinate 10-15, EtOH 10-20, propylene glycol 10-15, PEG 35-40, water 10-15, and flavors 2-3%.

IT 43200-80-2, Zopiclone 138729-47-2, Esopiclone

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (buccal sprays or capsule containing drugs for treating disorders of central nervous system)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RN 138729-47-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L8 ANSWER 2 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:905802 HCAPLUS

DOCUMENT NUMBER: 137:389166

TITLE: Delivery of sedative-hypnotics through an inhalation

route

INVENTOR(S): Rabinowitz, Joshua D.; Zaffaroni, Alejandro C.

PATENT ASSIGNEE(S): Alexza Molecular Delivery Corporation, USA

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 31

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE				
WO 2002094230	A1 2002 112 8	WO 2002-US15585	20020517 <				
W: AE, AG,	AL, AM, AT, AU, AZ,	BA, BB, BG, BR, BY,	BZ, CA, CH, CN,				
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		MK, MN, MW, MX, MZ,					
		SI, SK, SL, TJ, TM,					
		ZW, AM, AZ, BY, KG,					
		SL, SZ, TZ, UG, ZM,					
		GR, IE, IT, LU, MC,					
		GN, GQ, GW, ML, MR,					
CA 2446904		CA 2002-2446904					
WO 2003026631		WO 2002-US18543					
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		DZ, EC, EE, ES, FI,					
		JP, KE, KG, KP, KR,					
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	UZ, VN, YU, ZA, ZM,						
		SL, SZ, TZ, UG, ZM,					
		BE, CH, CY, DE, DK,					
		SE, TR, BF, BJ, CF,	CG, CI, CM, GA,				
	GW, ML, MR, NE, SN,						
EP 1392262		EP 2002-741994	_ , , _ ,				
		GB, GR, IT, LI, LU,	NL, SE, MC, PT,				
IE, SI,	LT, LV, FI, RO, MK,	CY, AL, TR					

TD 2005502425	mo 00050000	TD 0000 500060	00000510
JP 2005503425	T2 20050203		20020513
CA 2446990	AA 20021128		20020517 <
EP 1389094	A1 20040218		20020517
		GB, GR, IT, LI, LU,	NL, SE, MC, PT,
IE, SI, LT,	LV, FI, RO, MK,		•
JP 2004536805	T2 20041209	JP 2002-590949	20020517
US 2004126326	A1 20040701	US 2003-734902	20031212 <
US 2004127481	A1 20040701	US 2003-735198	20031212 <
US 2004126327	A1 20040701		20031212 <
US 2004127490	A1 20040701		20031212 <
US 2004126328	A1 20040701		20031212 <
US 2004126329	A1 20040701		20031212 <
US 2004156788	A1 20040812		20031230 <
US 2004156789	A1 20040812	US 2003-749536	20031230 <
US 2004156790	A1 20040812		20031230 <
US 2004156791	A1 20040812 A1 20040812		20031230 <
US 2005075273	A1 20050407		
US 2005073273			20031230 <
	A1 20050428	US 2003-749537	20031230 <
US 2004184996	A1 20040923		20040127 <
US 2004191179	A1 20040930		20040127 <
US 2004191180	A1 20040930		20040127 <
US 2004191181	A1 20040930		20040127 <
US 2004191182	A1 20040930		20040127 <
US 2004228807	A1 20041118		20040127 <
US 2004184997	A1 20040923		20040128 <
US 2004184998	A1 20040923	US 2004-768205	20040129 <
US 2004184999	A1 20040923	US 2004-768220	20040129 <
US 2004185000	A1 20040923	US 2004-768293	20040129 <
US 2004185003	A1 20040923	US 2004-769157	20040129 <
US 2004185004	A1 20040923	US 2004-769197	20040129 <
US 2004202617	A1 20041014		20040129 <
US 2004185001	A1 20040923	US 2004-769046	20040130 <
US 2004185002	A1 20040923		20040130 <
US 2004161385	A1 20040819		20040209 <
US 2004167228	A1 20040826		20040209 <
US 2004170569	A1 20040902		20040303 <
US 2004170570	A1 20040902		20010303 <
US 2004170572	A1 20040902	US 2004-792096	20040303 <
US 2004170572	A1 20040902		20040303 <
US 2004170373	A1 20040902 A1 20040923	US `2004-792239	
US 2004185005		US 2004-813721	20040331 <
			20040331 <
US 2004191183	A1 20040930	US 2004-814690	20040331 <
US 2004191184	A1 20040930		20040331 <
US 2004185006	A1 20040923	US 2004-815527	20040401 <
US 2004185007	A1 20040923	US 2004-816407	20040401 <
US 2004185008	A1 20040923	US 2004-816567	20040401 <
US 2004191185	A1 20040930	US 2004-816492	20040401 <
PRIORITY APPLN. INFO.:		US 2001-294203P	P 20010524
		US 2001-317479P	P 20010905
		US 2001-336218P	P 20011030
		US 2001-345876P	P 20011109
		US 2001-332280P	P 20011121
		US 2002-146516	A1 20020513
		WO 2002-US18543	W 20020513
		US 2002-150267	A1 20020515
		US 2002-150268	A1 20020515
		US 2002-151596	A1 20020516
		US 2002-151626	A1 20020516
		US 2002-150591	A1 20020517
•			

US	2002-150857	A1	20020517
WO	2002-US15585	W	20020517
US	2002-152639	A1	20020520
US	2002-152640	A 1	20020520
US	2002-152652	A1	20020520
US	2002-153139	A1	20020520
US	2002-153311	A1	20020521
US	2002-153831	A 1	20020521
US	2002-153839	A 1	20020521
US	2002-155373	A 1	20020522
US	2002-155621	A1	20020522
US	2002-155703	A1	20020522
US	2002-155705	A1	20020522
US	2002-154594	A1	20020523
US	2002-154765	A 1	20020523
US	2002-155097	A1	20020523
US	2003-734902	A1	20031212
US	2003-735198	A1	20031212
US	2003-735199	A1	20031212
US	2003-735495	A1	20031212
US	2003-735496	A 1	20031212
US	2003-735497	A1	20031212
US	2003-749535	A1	20031230
US	2003-749536	A1	20031230
US	2003-749537	A1	20031230
US	2003-749539	A1	20031230
US	2003-749783	A 1	2,0031230
US		A 1	20031230

AB The present invention relates to the delivery of sedative-hypnotics through an inhalation route, specifically, to aerosols containing sedative-hypnotics that are used in inhalation therapy. An aerosol composition comprises particles containing at least 5%, preferably 10%, of a sedative-hypnotic drug to be delivered to a mammal through an inhalation route. A method for preparation of aerosol comprises (a) heating a composition containing a sedative-hypnotic drug to form a vapor, and (b) allowing the vapor to cool, thereby forming a condensation aerosol comprising particles, which is inhaled by the mammal. A kit for delivering a sedative-hypnotic drug through an inhalation route to a mammal is provided comprising (a) a composition containing at least 5% of the drug, and (b) a device

that forms aerosol from the composition, the device comprising (i) an element for heating the composition to form a vapor, (ii) an element allowing the vapor to cool and form an aerosol, and (iii) an element permitting the mammal to inhale the aerosol. For example, a sedative-hypnotic drug was coated on aluminum foil and the coated foil was heated using a halogen bulb to afford thermal vapor (including aerosol). The purity of aerosol was dependent on the coat thickness, i.e., a linear decrease in film thickness is associated with a linear decrease in impurities.

IT 43200-80-2, Zopiclone

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(kit for delivery of sedative-hypnotics through an inhalation route)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT: 2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:780683 HCAPLUS

DOCUMENT NUMBER:

135:335156

TITLE:

Modified-release formulations containing a hypnotic

agent

INVENTOR(S):

Platteeuw, Johannes Jan; Van Den Heuvel, Dennie Johan

Marijn; Van Dalen, Frans; Lemmens, Jacques Maria

PATENT ASSIGNEE(S):

Synthon B.V., Neth. PCT Int. Appl., 41 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

	PATENT NO. KII					KIN	D	DATE			APPLICATION NO. DATE								
		2001								1	WO 2	001-	 NL29	9		2	0010	412	<
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		D₩.	VN,	YU,	ZA,	ZW,	AM,	ΑZ,	SL, BY, SD,	KG,	ΚZ,	MD,	RU,	TJ,	TM				
		KW.	·DE,	DK,	ES,	FI,	FR,	GB,	GR, GN,	ΙE,	IT,	LU,	MC,	NL,	PT,	SE,			
		2001	0506	61		A 5		2001	1030		AU 2	001-	5066	1		2			<
	EP	1272																	
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PRIO		2004 Y APP				A1		2004	0311	1	US 2	003- 000- 001-	1969	39P		P 2		413	<
AB	Hvt	onoti	c ph	arma	ceut	ical	com	ons.	are			001-				_		413	

AB Hypnotic pharmaceutical compns. are made from pellets and exhibit a modified release. Zolpidem or a pharmaceutically acceptable salt thereof is a typical hypnotic. The pellets are preferably spherical and exhibit a dissoln. profile that includes 60% of the hypnotic agent being released from the pellet not earlier than 5 min from the start of a specified in vitro dissoln. test. Although the modified release profile can include 50 of the hypnotic agent being released not earlier than 15 min after the start of the dissoln. test, the pellet preferably does not contain a release rate controlling excipient or coating. Instead, microcryst.

cellulose and the active constitute the majority of the pellet, e.g. 90 or more. Spherical pellets are also made by a convenient method that is applicable to any pharmaceutically active agent. Microcryst. cellulose 1703, zolpidem hydrochloride hydrate 189.2 g, and water 1892 mL were mixed and stirred for 15 min. Water was then removed and the resulted pellets were dried and fractionated by sieving.

IT 43200-80-2, Zopiclone

> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (modified-release formulations containing hypnotic agent)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

HCAPLUS COPYRIGHT 2005 ACS on STN ANSWER 4 OF 23

ACCESSION NUMBER: 2001:581687 HCAPLUS

DOCUMENT NUMBER: 135:157684

TITLE: Continuous method for preparing pharmaceutical

granules

DIMD

INVENTOR(S): Martin-Letellier, Stephane; Le Thiesse, Jean-Claude

PATENT ASSIGNEE(S): Rhodia Chimie, Fr.

SOURCE: PCT Int. Appl., 23 pp.

CODEN: PIXXD2

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DOCUMENT TYPE: Patent

French LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

DATENT NO

	PATEN	NO.			KINI								NO.			41F		
	WO 200	10565	 49													0010	 124 <-	-
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		LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,	
		SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VN,	
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		ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GW,	ML,	MR,	ΝE,	SN,	TD,	TG			
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	EP 125	1830			A1	:	2002	1030]	EP 2	001-	9098	80		2	0010	124 <-	-
	R	ΑT,										LI,	LU,	NL,	SE,	MC,	PT,	
		ΙE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR							
	JP 200	45001	93		T2	:	2004	0108		JP 2	001-	5562	41		2	0010	124	
	US 200	32240	57		A1	:	2003	1204	1	US 2	002-	1825	27		2	00209	930 <-	-
PRIO	RITY A	PLN.	INFO	.:						FR 2	000-	1457		2	A 2	0000	204	
																0010		
AB	The in	venti	on c	once	rns a	a me	thod	for	for	nula	ting	in	the	form	of (granı	ıles	

ADDITION NO

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one or several active pharmaceutical principles, characterized in that it consists in continuously introducing various ingredients to be granulated and in granulating said mixture using a device comprising a chamber and at least a rotary stirring arm, and in the presence of a sufficient amount of a binder solution until said granules are obtained. Acetaminophen and a solution of starch was used in the granulation device and granulated. Phys. properties of tablets made from above granules 1000.0, starch 61.5, and magnesium stearate 2.0 g.

IT 43200-80-2, Zopiclone

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (continuous method for preparing pharmaceutical granules)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

3

ACCESSION NUMBER: 2001:396644 HCAPLUS

DOCUMENT NUMBER: 135:24671

TITLE: Solid carriers for improved delivery of active

ingredients in pharmaceutical compositions

INVENTOR(S): Patel, Manesh V.; Chen, Feng-jing

PATENT ASSIGNEE(S): Lipocine, Inc., USA

SOURCE: PCT Int. Appl., 107 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 12

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE				
WO 2001037808	A1 20010531	- WO 2000-US32255	20001122 <				
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CR, CU, CZ,	DE, DK, DM, DZ,	EE, ES, FI, GB, GD,	GE, GH, GM, HR,				
HU, ID, IL,	IN, IS, JP, KE,	KG, KP, KR, KZ, LC,	LK, LR, LS, LT,				
LU, LV, MA,	MD, MG, MK, MN,	MW, MX, MZ, NO, NZ,	PL, PT, RO, RU,				
SD, SE, SG,	SI, SK, SL, TJ,	TM, TR, TT, TZ, UA,	UG, UZ, VN, YU,				
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RW: GH, GM, KE,	LS, MW, MZ, SD,	SL, SZ, TZ, UG, ZW,	AT, BE, CH, CY,				
DE, DK, ES,	FI, FR, GB, GR,	IE, IT, LU, MC, NL,	PT, SE, TR, BF,				
BJ, CF, CG,	CI, CM, GA, GN,	GW, ML, MR, NE, SN,	TD, TG				
		US 1999-447690					
		CA 2000-2391923					
EP 1233756	A1 20020828	EP 2000-980761	20001122 <				
R: AT, BE, CH,	DE, DK, ES, FR,	GB, GR, IT, LI, LU,	NL, SE, MC, PT,				
IE, SI, LT,	LV, FI, RO, MK,	CY, AL, TR					
JP 2003517470	T2 20030527	JP 2001-539423	20001122				

PRIORITY APPLN. INFO.:

US 1999-447690 A 19991123 WO 2000-US32255 W 20001122

The present invention provides solid pharmaceutical compns. for improved AB delivery of a wide variety of pharmaceutical active ingredients contained therein or sep. administered. In one embodiment, the solid pharmaceutical composition includes a solid carrier, the solid carrier including a substrate and an encapsulation coat on the substrate. The encapsulation coat can include different combinations of pharmaceutical active ingredients, hydrophilic surfactant, lipophilic surfactants and triglycerides. In another embodiment, the solid pharmaceutical composition includes a solid carrier, the solid carrier being formed of different combinations of pharmaceutical active ingredients, hydrophilic surfactants, lipophilic surfactants and triglycerides. The compns. of the present invention can be used for improved delivery of hydrophilic or hydrophobic pharmaceutical active ingredients, such as drugs, nutritionals, cosmeceuticals and diagnostic agents. A composition contained glyburide 1, PEG 40 stearate 33, glycerol monolaurate 17, and nonpareil seed 80 q.

IT 43200-80-2, Zopiclone

> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (solid carriers for improved delivery of active ingredients in pharmaceutical compns.)

43200-80-2 HCAPLUS RN

1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-CN dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 6 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:300514 HCAPLUS

DOCUMENT NUMBER:

134:331617

TITLE:

SOURCE:

Oil-in-water emulsion compositions for polyfunctional

active ingredients

INVENTOR (S):

Chen, Feng-jing; Patel, Mahesh V.

PATENT ASSIGNEE(S):

Lipocine, Inc., USA PCT Int. Appl., 82 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT	PATENT NO.				KIND DATE				APPLICATION NO.						DATE			
WO 2001	0285	 55		A1	A1 20010426				WO 2000-US28835									
W :	ΑE,	AG,	AL,	AM,	AT,	AU,	ΑZ,	BA,	BB,	BG,	BR,	BY,	ΒZ,	CA,	CH,	CN,		
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	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,		
				MD,														
	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UZ,	VN,	YU,		

ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 2002107265 A1 20020808 US 1999-420159 19991018 <--

US 6720001 **B2** 20040413

PRIORITY APPLN. INFO.: US 1999-420159 A 19991018

Pharmaceutical oil-in-water emulsions for delivery of polyfunctional active ingredients with improved loading capacity, enhanced stability, and reduced irritation and local toxicity are described. Emulsions include an aqueous phase, an oil phase comprising a structured triglyceride, and an emulsifier. The structured triglyceride of the oil phase is substantially free of triglycerides having three medium chain (C6-C12) fatty acid moieties, or a combination of a long chain triglyceride and a polarity-enhancing polarity modifier. The present invention also provides methods of treating an animal with a polyfunctional active ingredient, using dosage forms of the pharmaceutical emulsions. For example, an emulsion was prepared, with cyclosporin A as the polyfunctional active ingredient dissolved in an oil phase including a structured triglyceride (Captex 810D) and a long chain triglyceride (safflower oil). The composition contained (by weight) cyclosporin A 1.0, Captex 810D 5.0, safflower oil 5.0, BHT 0.02, egg phospholipid 2.4, dimyristoylphosphatidyl glycerol 0.2, glycerol 2.25, EDTA 0.01, and water up to 100%, resp.

IT 43200-80-2, Zopiclone

> RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (oil-in-water emulsion compns. for polyfunctional active ingredients)

RN43200-80-2 HCAPLUS

1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-CN dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 7 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN ACCESSION NUMBER: 2001:294874 HCAPLUS

6

DOCUMENT NUMBER: 134:316089

TITLE: Method of using deuterated calcium channel blockers

INVENTOR(S): Foster, Robert T.

PATENT ASSIGNEE(S): Isotechnika, Inc., Can.

SOURCE: U.S., 61 pp., Cont.-in-part of U.S. Ser. No. 138,125.

CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

REFERENCE COUNT:

L₈

PATENT NO.	KIND	DATE .	APPLICATION NO.	DATE				
US 6221335	B1	20010424	US 1998-184990	19981103 <				
US 5846514	Α	19981208	US 1996-725992	19961004 <				

10691628.trn

Page 24

14:51

THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS

PRIORITY APPLN. INFO.:

US 1994-217897

US 1995-410530

B2 19940325

US 1996-725992

A1 19961004

US 1998-138125

A2 19980824

OTHER SOURCE(S): MARPAT 134:316089

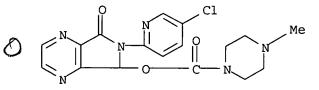
AB Therapeutic methods and compns. using deuterated enriched 2-[(2-aminoethoxy)methyl]-4-(2-chlorophenyl)-1,4-dihydro-6-methyl-3,5-pyridinedicarboxylic acid 3-Et 5-Me ester and other deuterated dihydropyridine compds. are described. The deuterated compds. exhibit enhanced efficacy in blocking calcium channels over non-deuterated dihydropyridines.

IT 43200-80-2, Zopiclone RL: PRP (Properties)

(isotope ratio mass spectrometry in determining source of manufacture)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

2001:100975 HCAPLUS

DOCUMENT NUMBER:

134:152652

TITLE:

Nitrogen heterocyclic compounds and amino acid

compositions for reducing oxygen consumption during

physical exercise

INVENTOR(S):

Wiss, Oswald

PATENT ASSIGNEE(S):

Switz.

SOURCE:

PCT Int. Appl., 48 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO	PATENT NO.				KIND DATE			APPLICATION NO.						DATE			
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WO 2001008680			A1 20010208			1	WO 2000-CH400					20000721 <					
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I	HU, ID,	IL,	IN,	IS,	J₽,	ΚE,	KG,	KΡ,	KR,	KZ,	LC,	LK,	LR,	LS,	LT,		
]	LU, LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	PL,	PT,	RO,	RU,		
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RW: C	GH, GM,	ΚE,	LS,	MW,	ΜZ,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,		
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EP 120008	32		A1	:	20020	0502		EP 2000-943512					20000721 <				
R: 1	AT, BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	.PT,		

10/30/2005

10691628.trn

IE, SI, LT, LV, FI, RO, MK, CY, AL

JP 2003505505 T2 20030212 JP 2001-513410 20000721 US 6703371 B1 20040309 US 2002-30708 20020114 <--PRIORITY APPLN. INFO.: CH 1999-1388 Α 19990728 WO 2000-CH400 W 20000721

The invention relates to pharmaceutically active substances from the group comprising midazolam and compds. with a methyl-substituted nitrogen atom that is the ring atom of a nitrogenous heterocycle. These substances are used to reduce the oxygen consumption during a phys. activity. They can be administered together with an effective amount of D-glucose, D-maltose, ethanol, a glucogenic amine, a glucogenic amino acid or an amino acid (metabolizable by glyoxylate) or a dipeptide and thiamine, or a combination of folic acid and cyanocobalamin, under the proviso that the third component is thiamine or its salt if the second component is D-glucose, D-maltose, a glucogenic amine, a glucogenic amino acid non-metabolizable by glyoxylate, or a dipeptide. Thus, L-tyrosine 100, thiamine 50, pyridoxine 50, ascorbic acid 100, cyanocobalamin 0.05, dextromethorphan 1, and gelatin 200 parts were dissolved in 1000 parts warm water. Gelatin beads were obtained after spraying.

IT 43200-80-2, Zopiclone

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(nitrogen heterocyclic compds. and amino acid compns. for reducing oxygen consumption during phys. exercise)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001

2001:10601 HCAPLUS

DOCUMENT NUMBER:

134:76391

TITLE:

Timed dual release dosage forms comprising a short

acting hypnotic or a salt thereof

INVENTOR(S):

Alaux, Gerard; Andre, Frederic; Ducassou, Jean; Lewis,

Gareth

PATENT ASSIGNEE(S):

Sanofi-Synthelabo, Fr.

SOURCE: Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1064937	A1	20010103	EP 1999-401605	19990628 <

10691628.trn

Page 26

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    WO 2001000181
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                                 20010104
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    WO 2001000181
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             HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,
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     EP 1194132
                          A2
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    HK 1043057
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                                                                    20040406 <--
PRIORITY APPLN. INFO.:
                                             EP 1999-401605
                                                                 A 19990628
                                            WO 2000-EP6792
                                                                 W
                                                                    20000627
                                             US 2001-19726
                                                                 B1 20011220
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AB The invention relates to timed dual release dosage forms of short acting hypnotics or salts adapted to release the short-acting hypnotic over a predetd. time, according to a profile of dissoln. characterized in that it comprises two release pulses, the first being immediate and the second being delayed by a fixed time. Immediated-release pellets containing zolpidem hemitartrate were prepared and coated pellets containing zolpidem hemitartrate, tartaric acid and benzalkonium chloride prepared and coated with a Eudragit RS100/RL100 solution

IT 43200-80-2, Zopiclone 138680-08-7, 1-

Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester, (R)-

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(timed dual release dosage forms comprising a short acting hypnotic or a salt)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RN 138680-08-7 HCAPLUS

1-Piperazinecarboxylic acid, 4-methyl-, (5R)-6-(5-chloro-2-pyridinyl)-6,7-CN dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Methods of making and using N-desmethylzopiclone Jerussi, Thomas P.; Senanayake, Chrisantha H.; Rubin,

1. modern

HCAPLUS COPYRIGHT 2005 ACS on STN L8 ANSWER 10 OF 23

ACCESSION NUMBER: 2000:824111 HCAPLUS

DOCUMENT NUMBER:

134:9361

TITLE:

INVENTOR(S):

Paul D. Hong, Yaping; Bakale, Roger A.; Xiang, Tingjian; McConville, Fran A. Sepracor Inc., USA

PCT Int. Appl., 44 pp. CODEN: PIXXD2

DOCUMENT TYPE:

SOURCE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

	PATENT NO.						KIND DATE					APPLICATION NO.						DATE			
	WO	2000	A1 20001123				1	WO 2000-US12820						20000511 <							
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			LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	NO,	NZ,	PL,	PT,	RO,	RU,	SD,	SE,			
			SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,	UG,	UZ,	VN,	YU,	ZA,	ZW,			
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	CA	2373	797			AA	7	2000	1123		CA 2	000-3	2373	797		20	00009	511 <			
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			ΙE,	SI,	LT,	LV,	FI,	RO													
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BR	2000010573	A	20020604	BR	2000-10573		20000511 <
· JP	2002544232	T 2	20021224	JР	2000-617901		20000511 <
NZ	515626	Α	20040430	NZ	2000-515626		20000511
AU	776000	B2	20040819	ΑU	2000-48364		20000511
US	2002019398	A1	20020214	US	2001-877103		20010611 <
US	6506753	B2	20030114				
NO	2001005542	Α	20020114	NO	2001-5542		20011113 <
ZA	2001009383	Α	20021114	ZĄ	2001-9383		20011114 <
US	6458791	B2	20021001	US	2002-40475		20020109 <
US	2002143016	A1	20021003				
US	2003119841	A1	20030626	US	2002-259851		20020930 <
US	2003166657	A1	20030904	US	2003-340957		20030113 <
US	6946464	B2	20050920				
PRIORITY	Y APPLN. INFO.:			US	1999-134239P	P	19990514
				US	1999-135037P	P	19990520
				US	2000-548607	Α	20000413
				WO	2000-US12820	W	20000511
				US	2001-877103	A3	20010611
				US	2002-40475	A3	20020109
7 TO 1001-						-	

AB The invention is directed to compns. comprising, and methods of using, racemic N-desmethylzopiclone, optically pure (+)-N-desmethylzopiclone, and optically pure (-)-N-desmethylzopiclone in the treatment and prevention of diseases and conditions in mammals. The invention is further directed to novel methods of preparing N-desmethylzopiclone, optically pure (+)-N-desmethylzopiclone, and optically pure (-)-N-desmethylzopiclone. The compds. are administered to patients suffering from, anxiety, convulsions, depression, behavioral disorders, sleep disorders, etc.

IT 59878-63-6P, N-Desmethylzopiclone 151776-26-0P,

(+)-N-Desmethylzopiclone 151776-27-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(N-desmethylzopiclone for treatment of anxiety and convulsions and other disorders)

RN 59878-63-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RN 151776-26-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 151776-27-1 HCAPLUS

CN 1-Piperazinecarboxylic acid, (5R)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 300701-71-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of N-desmethylzopiclone for treatment of anxiety and convulsions and other disorders)

RN 300701-71-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester, monohydrochloride (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

● HCl

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RN 138680-08-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5R)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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Page 31

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10691628.trn

IT 138729-47-2P, (+)-Zopiclone 308086-45-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of N-desmethylzopiclone for treatment of anxiety and convulsions and other disorders)

RN 138729-47-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

RN 308086-45-5 HCAPLUS

CN Butanedioic acid, hydroxy-, (2R)-, compd. with (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl 4-methyl-1-piperazinecarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 138729-47-2 CMF C17 H17 C1 N6 O3

Absolute stereochemistry. Rotation (+).

CM 2

CRN 636-61-3 CMF C4 H6 O5

Absolute stereochemistry.

REFERENCE COUNT:

3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN L8

ACCESSION NUMBER:

2000:754414 HCAPLUS

DOCUMENT NUMBER:

133:325631

TITLE:

Stereospecific delivery of a drug using

electrotransport

INVENTOR(S):

Gupta, Suneel K.; Sathyan, Gayatri; Padmanabhan, Rama

ALZA Corporation, USA

PATENT ASSIGNEE(S): SOURCE:

U.S., 22 pp. CODEN: USXXAM

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

100(1)

PATENT INFORMATION:

OF	
9	

	PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
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	US 6136327	Α	20001024	US 1997-982245		19971201 <
	JP 2001524364	T2	20011204	JP 2000-522969		19981130 <
PRIC	RITY APPLN. INFO.:	•		US 1997-982245	Α	19971201
				WO 1998-US25387	W	19981130

AB Preferential delivery via electrotransport of a preferred isomeric form of a pharmaceutically active chiral compound from a mixture of the isomeric forms of said compound is provided. A method of decreasing the delivery via electrotransport of a less preferred isomer of a drug is also provided. Following electrotransport administration of ketorolac, the mean amount of R isomer absorbed was lower than that of the S isomer.

IT 43200-80-2, Imovane

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (stereospecific delivery of a drug using electrotransport)

RN 43200-80-2 HCAPLUS

1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-CN dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

15

L8 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2000:725436 HCAPLUS

DOCUMENT NUMBER: . 133:301171

TITLE: Compositions and methods for improved delivery of

ionizable hydrophobic therapeutic agents

INVENTOR(S): Chen, Feng-jing; Patel, Manesh V.

PATENT ASSIGNEE(S): Lipocine, Inc., USA SOURCE: PCT Int. Appl., 99 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: Engi FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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PATENT NO.
                           KIND
                                   DATE
                                              APPLICATION NO.
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                           ----
                                             WO 2000-US7342
     WO 2000059475
                           A1
                                   20001012
                                                                         20000316 <--
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,
              CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
              IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV,
              MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG,
              SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM,
              AZ, BY, KG, KZ, MD, RU, TJ, TM
         RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
     US 6383471
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                                                US 1999-287043
                                                                         19990406 <--
     CA 2366702
                            AA
                                   20001012
                                                CA 2000-2366702
                                                                         20000316 <--
     EP 1165048
                           A1
                                   20020102
                                                EP 2000-916547
                                                                         20000316 <--
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.:
                                                US 1999-287043
                                                                      A 19990406
                                                WO 2000-US7342
                                                                      W 20000316
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- AB The present invention is directed to a pharmaceutical composition including a hydrophobic therapeutic agent having at least one ionizable functional group, and a carrier. The carrier includes an ionizing agent capable of ionizing the functional group, a surfactant, and optionally solubilizers, triglycerides, and neutralizing agents. The invention further relates to a method of preparing such compns. by providing a composition of an ionizable hydrophobic therapeutic agent, an ionizing agent, and a surfactant, and neutralizing a portion of the ionizing agent with a neutralizing agent. The compns. of the invention are particularly suitable for use in oral dosage forms. A carrier containing concentrated phosphoric acid 0.025, Tween-20
 - 0.3, Arlacel 186 0.2, sodium taurocholate 0.15, propylene glycol 0.3 g was formulated. Itraconazole was included in the carrier at 30 mg/mL for testing the stability of the itraconazole solution upon dilution in simulated gastric fluid.
- IT 43200-80-2, Zopiclone
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. containing hydrophobic therapeutic agents and carriers containing ionizing agents and surfactants and triglycerides)
- RN 43200-80-2 HCAPLUS
- CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

3

ACCESSION NUMBER:

2000:608551 HCAPLUS

DOCUMENT NUMBER:

133:213151

TITLE:

Pharmaceutical compositions and methods for improved

delivery of hydrophobic therapeutic agents

INVENTOR (S):

Patel, Manesh V.; Chen, Feng-Jing

PATENT ASSIGNEE(S): SOURCE:

Lipocine, Inc., USA PCT Int. Appl., 98 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE:

Engiis

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION: '

		PA'I	CENT :	NO.			KINI)	DATE			APPI	LICAT	ION I	NO.		DATE			
	1	wo	2000	0500	07		A1	-	2000	0831		WO 2	2000 <i>-</i>	 US16	· 5		20000105 <			
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•													, PT, , UZ,							
			DW.			•			TJ,			יים אינים	·	7714	7. TT		CII	GV.		
			KW:	DK,	ES,	FI,	FR,	GB,	GR,	ΙE,	ΙT,	LU	, UG, , MC,	NL,	PT,					
a 0	/ . 1	US 1	6294										, SN, 1999-				1	9990:	226	<
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	:	ΕP					A1		2001	1205							20000105 <			
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			2002 5138										2000-		-			0000		<
	PRIOR								2004	0221		US :	2000- 1999-	2586	54	1	1	9990	226	
												WO 2	2000-	US16	5	V	1 2	0000	105	

AB The present invention relates to triglyceride-free pharmaceutical compns. for delivery of hydrophobic therapeutic agents. Compns. of the present invention include a hydrophobic therapeutic agent and a carrier; where the carrier is formed from a combination of a hydrophilic surfactant and a hydrophobic surfactant. Upon dilution with an aqueous solvent, the composition forms

a clear, aqueous dispersion of the surfactants containing the therapeutic agent.

The invention also provides methods of treatment with hydrophobic therapeutic agents using these compns. A pharmaceutical composition contained

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cyclosporin 0.14, Cremophor RH-40 0.41, Arlacel186 0.29, sodium taurocholate 0.26, and propylene glycol 0.46 mg.

IT 43200-80-2, Zopiclone

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical compns. and methods for improved delivery of hydrophobic therapeutic agents)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

4

ACCESSION NUMBER: 2000:383610 HCAPLUS

DOCUMENT NUMBER: 133:22433

TITLE: Controlled-release dosage forms comprising a short

acting hypnotic or a salt

INVENTOR(S): Alaux, Gerard; Lewis, Gareth; Andre, Frederic

PATENT ASSIGNEE(S): Synthelabo S. A., Fr. SOURCE: Eur. Pat. Appl., 24 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE --------- ____ -----_____ _____ EP 1005863 A1 20000607 EP 1998-403037 19981204 <--R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO CA 2391983 20000615 CA 1999-2391983 19991201 <--AΑ WO 2000033835 A1 20000615 WO 1999-EP10454 19991201 <--AE, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG BR 9915939 20010911 Α BR 1999-15939 19991201 <--EP 1135125 **A**1 20010926 EP 1999-968394 19991201 <--EP 1135125 B1 20050316 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO TR 200101588 T2 20011022 TR 2001-200101588 19991201 <--JP 2002531499 T2 20020924 JP 2000-586328 19991201 <--

NZ 511750	Α	20031031	NZ 1999-511750		19991201
AU 771902	B2	20040408	AU 2000-25399		19991201
AT 290861	E	20050415	AT 1999-968394		19991201
PT 1135125	T	20050729	PT 1999-968394		19991201
TW 565448	В	20031211	TW 1999-88121131		19991203
ZA 2001004169	Α	20020522	ZA 2001-4169		20010522 <
NO 2001002668	Α	20010806	NO 2001-2668		20010530 <
US 6514531	B1	20030204	US 2001-857154		20010716 <
HK 1037319	A1	20050826	HK 2001-106939		20011003
PRIORITY APPLN. INFO.:			EP 1998-403037	Α	19981204
			WO 1999-EP10454	W	19991201

AB The present invention relates to controlled-release dosage forms of short acting hypnotics or salts thereof adapted to release the short acting hypnotic over a predetd. time period, according to a biphasic profile of dissoln., where the first phase is an immediate release phase and the second phase is a prolonged release phase. Thus, prolonged-release tablets comprising 10 mg zolpidem hemitartrate were prepared from zolpidem hemitartrate 8.3, lactose 86.6, citric acid 2.5, HPMC-606 2.1, and Mg stearate 0.5%. Tablets were coated, in a pan coater, with a sufficient quantity of the following mixture to obtain the desired dissoln. profile: Et cellulose 2.0, di-Et phthalate 0.4, HPMC-606 2.0, isopropanol 47.8, and dichloromethane 47.8%.

IT 43200-80-2, Zopiclone 138680-08-7, (R)-Zopiclone
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(controlled-release dosage forms comprising hypnotic or a salt)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RN 138680-08-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5R)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

REFERENCE COUNT:

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 15 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1999:795635 HCAPLUS

DOCUMENT NUMBER:

132:40535

TITLE:

Pharmaceutical composition for treating or preventing

sleep disorders

INVENTOR(S): PATENT ASSIGNEE(S): Ohkawa, Shigenori; Miyamoto, Masaomi Takeda Chemical Industries, Ltd., Japan

SOURCE:

PCT Int. Appl., 25 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PAT	CENT 1	NO.			KIN)	DATE			APPL	I CAT	I NOI	10.		D	ATE		
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	RW:	GH, ES,	GM, FI,	KE, FR,	LS, GB,	MW, GR,	SD, IE,	SL, IT,	SZ, LU,	UG, MC,	AZ, ZW, NL, TD,	AT, PT,	BE,	CH,	CY,	DE,	DK,	
CA	2332										999-2		521		19	9906	508	<
AU	9940	605			A1		1999	1230		AU 1	999-4	40609	5		19	9906	508	<
	2000 3509							0229 0322		JP 1:	999-:	16056	58		19	99906	508	<
	1100! 1100!				A2 B1			0523 0827		EP 1:	999-9	92396	50		19	99906	508	<
		AT, IE,		CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
ŪS∕	2479 6348	4,85			E B1						999-9 000-					99906 00011		<
PRIORIT	APP	ĽN.	INFO	. :							998-: 999-					99806 99906		

AB The present invention provides a pharmaceutical composition for treating or preventing sleep disorders which comprises (S)-N-[2-(1,6,7,8-tetrahydro-2Hindeno [5,4-b] furan-8-yl) ethyl] propionamide (I) in combination with at least 1 active component selected from zolpidem, zopiclone, triazolam and brotizolam. Thus, I was obtained in a series of steps starting from 2,3-dihydrobenzofuran-5-carbaldehyde. Tablets were prepared from I 10.0, lactose 60.0, corn starch 35.0, gelatin 3.0, and Mg stearate 2.0 g. Treatment with compound I (0.003 mg/kg, p.o.) had no significant effects on the latency of any sleep stages. Treatment with triazolam alone (0.03 mg/kg) did not affect general behavior and it did not cause ataxia and sedation as such were seen when high doses of triazolam are given. Co-administration of I and triazolam shortened the latencies of deep slow wave sleep, stage 3 and stage 4, and it significantly shortened the latency of the stage 4 sleep. The co-administration also had no significant effects on general behavior of monkeys.

ΙT 43200-80-2, Zopiclone

> RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)

(pharmaceutical composition for treating or preventing sleep disorders)

RN 43200-80-2 HCAPLUS

1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-CN dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

PATENT ASSIGNEE(S):

1998:811430 HCAPLUS

DOCUMENT NUMBER:

130:43378

TITLE:

Enhancement of the efficacy of nifedipine by

deuteration.

INVENTOR (S):

Foster, Robert T.; Lewanczuk, Richard; Caille, Gilles

Isotechnika Inc., Can.

SOURCE:

U.S., 57 pp., Cont.-in-part of U.S. Ser. No. 410,530,

abandoned.

CODEN: USXXAM

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5846514	Α	19981208	US 1996-725992	19961004 <
US 6221335	B1	20010424	US 1998-184990	19981103 <
US 6334997	B1	20020101	US 2000-558325	20000426 <
US 2002094995	A1	20020718	US 2001-987370	20011114 <
US 6818200	B2	20041116		
US 2004253180	A1	20041216	US 2004-795133	20040305 <
PRIORITY APPLN. INFO.:			US 1994-217897 B	2 19940325
			US 1995-410530 B	2 19950327
			US 1996-725992 A	1 19961004
			US 1998-138125 A	2 19980824
			US 2000-558325 A	1 20000426
			US 2001-987370 A	1 20011114

OTHER SOURCE(S): MARPAT 130:43378

A method of enhancing the efficiency and increasing the duration of action of drugs (e.g. dihydropyridines and anti-bacterials) and particularly of nifedipine and penicillins wherein one or more hydrogen atoms are deuterated and wherein the deuterated drug has unexpectedly improved properties when used in much lower concns. than unmodified drug. A method for determining the identity and bioequivalency of a new drug is also disclosed wherein the mol. and isotope structure of a new drug is determined by isotope ratio mass spectrometry and compared with the mol. and isotope structure of a known human drug. Deuterated nifedipine was prepared the hypotensive effect of the deuterated derivative was greater in rats than that of nifedipine itself.

IT 43200-80-2D, Zopiclone, deuterated

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

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Page 39

(enhancement of the efficacy of nifedipine by deuteration)

RN 43200-80-2 HCAPLUS

CN1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

REFERENCE COUNT:

31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1995:826770 HCAPLUS

DOCUMENT NUMBER:

123:208911

TITLE:

Manufacture of multilayer tablets to prevent isolation

of drugs for other uses

INVENTOR(S):

Bastin, Richard James; Lithgow, Bruce Hamilton

Rhone-Poulenc Rorer Ltd., UK

SOURCE:

PCT Int. Appl., 38 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT ASSIGNEE(S):

PA	TENT NO.			KIN	D D	ATE		;	APPL	ICAT	ION :	NO.		D	ATE		
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	9500800						0801			995-					9950:		
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NO 313267 B1 20020909

PRIORITY APPLN. INFO.: GB 1994-1894 A 19940201 WO 1995-GB137 W 19950124

AB This invention relates to an abuse resistant tablet containing two or more layers comprising one or more drugs and one or more gelling agents wherein the drug(s) and gelling agent(s) are contained in sep. layers of the tablet. The multilayer tablet is particularly suitable for the administration of drugs prone to abuse by unauthorized parenteral administration such as analgesics, hypnotics, and anxiolytics. A bilayered tablet containing 7.5 mg zopiclone was obtained by 2-stage pressing procedure, whereby a layer containing hydroxypropyl Me cellulose 30.00, CaHPO4 59.2, Na Croscarmellose 10.0, colloidal silica 0.3, and Mg stearate 0.5% was formed in the press and then granules containing zopiclone 6.00, lactose 18.52, CaHPO4 35.12, starch 35.12, Na starch glycolate 5.00, and Mg stearate 0.24 % were added and the press operated again.

IT 43200-80-2, Zopiclone

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (manufacture of multilayer tablets to prevent isolation of drugs for other uses)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

L8 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1993:463059 HCAPLUS

DOCUMENT NUMBER: 119:63059

TITLE: Treating sleep disorders, convulsive seizures, and

other disorders using optically pure (+)-zopiclone

INVENTOR(S): Young, James W.; Brandt, Steven

PATENT ASSIGNEE(S): Sepracor, Inc., USA SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.		KIND	DATE	APPLICATION NO.	DATE
WO 9310	787		A1	19930610	WO 1992-US10631	19921201 <
W:	AU, E	BB, BG,	BR, C	CA, CS, FI,	HU, JP, KR, LK, MG,	MN, MW, NO, NZ,
	PL, F	RO, RU,	SD, U	JA		
RW:	AT, E	BE, CH,	DE, I	OK, ES, FR,	GB, GR, IE, IT, LU,	MC, NL, PT, SE,
	BF, E	BJ, CF,	CG, C	CI, CM, GA,	GN, ML, MR, SN, TD,	TG .
AU 9332	455		A1	19930628	AU 1993-32455	19921201 <
US 5786	357		Α	19980728	US 1994-283497	19940801 <
US 643.6	936		B1	20020820	US 1998-121029	19980722 <
PRIORITY APP	LN. IN	IFO.:			US 1991-801312	A 19911202
					US 1992-984039	B1 19921201

WO 1992-US10631 A 19921201 US 1994-283497 A1 19940804

AB (+)-Zopiclone (I) is effective in treating sleep disorders and convulsive disorders. I is free of the side effects of (\pm) -zopiclone. I is also useful for treating disorders affected by the agonist binding to central nervous system or peripheral benzodiazepine receptors.

IT 138729-47-2, (+)-Zopiclone RL: BIOL (Biological study)

(epilepsy and insomnia treatment by)

RN 138729-47-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L8 ANSWER 19 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:

1992:591870 HCAPLUS

DOCUMENT NUMBER:

INVENTOR (S):

117:191870

TITLE:

Preparation of (-)-zopiclone Cotrel, Claude; Roussel, Gerard

PATENT ASSIGNEE(S):

Rhone-Poulenc Rorer SA, Fr.

SOURCE:

Eur. Pat. Appl., 5 pp.

CODEN: EPXXDW

DOCUMENT TYPE:

Patent French

LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND DATE	APPLICATION NO.	DATE
EP 495717 R: PT	A1 1992072	2 EP 1992-400111	19920116 <
FR 2671800 FR 2671800	A1 1992072 B1 1993031		19910117 <
ZA 9200302	A 1992102	8 ZA 1992-302	19920115 <
	, FI, HU, JP, NO		19920116 <
		, CI, CM, DE, DK, ES, FR, SE, SN, TD, TG	GA, GB, GN,
AU 9212264	• • • • • • • • • • • • • • • • • • • •	7 AU 1992-12264	19920116 <
JP 06504548		6 JP 1992-504006	19920116 <

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Page 42

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	EP 609210	B1	19950412					
	R: AT, BE, C	H, DE,	DK, ES, FR,	GB, G	R, IT, LI, L	U, NL, S	E	
		· E	19950415		1992-903994		19920116	<
	ES 2071486	Т3	19950616	ES	1992-903994		19920116	
	PL 166976	B1	19950731	\mathtt{PL}	1992-299834		19920116	<
	HU 68915	A2	19950828	HU	1993-2063		19920116	<
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					1993-109863		19930820	
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				US	1994-342794	B1	19941121	
					1995-493946		19950623	
					1998-124651	A1	19980729	
					2000-722438		20001128	
AB	The title compoun	d. prer	pared by opti	ical re	esolution of	racemic	zoniclone	28 1

AB The title compound, prepared by optical resolution of racemic zopiclone as the D-(+)-0,0'-dibenzolyltartrate salt, is about twice as active as the racemate and had LD50 of .apprx.1.5 g/kg orally in mice.

IT 43200-80-2

RL: PROC (Process)

(optical resolution of)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

IT 144025-93-4P 144025-94-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and decomposition of)

RN 144025-93-4 HCAPLUS

CN Butanedioic acid, 2,3-bis(benzoyloxy)-, [S-(R*,R*)]-, compd. with (+)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-

yl 4-methyl-1-piperazinecarboxylate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 138729-47-2

CMF C17 H17 C1 N6 O3

Absolute stereochemistry. Rotation (+).

CM 2

CRN 17026-42-5

CMF C18 H14 O8

Absolute stereochemistry. Rotation (+).

RN 144025-94-5 HCAPLUS

CN Butanedioic acid, 2,3-bis(benzoyloxy)-, [S-(R*,R*)]-, compd. with (-)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl 4-methyl-1-piperazinecarboxylate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 138680-08-7

CMF C17 H17 C1 N6 O3

Absolute stereochemistry.

CM 2

CRN 17026-42-5 CMF C18 H14 O8

Absolute stereochemistry. Rotation (+).

IT 138680-08-7P

RN 138680-08-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5R)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

IT 138729-47-2P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of, as sedative)

RN 138729-47-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

L8 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:542254 HCAPLUS

DOCUMENT NUMBER: 115:142254

TITLE: Lyophilized unit-dose pharmaceutical compositions

containing drug-cyclodextrin inclusion compounds

INVENTOR(S): Courteille, Frederic; Vanhoeve, Magali

PATENT ASSIGNEE(S): Rhone-Poulenc Sante, Fr. SOURCE: Eur. Pat. Appl., 9 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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Page 46

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	399902			B1	19931222		10100		17700322	`
		BE	CH			GR G	R, IT, LI, LU,	MT.	CF	
. FR	2647343	20,	C,	A1	19901130		1989-6781	Νш,	19890524	ـــدخ
	9003895			A			1990-3895		19900521	
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711	9057433	DG,	гт,	но, А1	19901218	•	1990-57433		19900522	_
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	5244881			A	19930914		1991-776344		19900523	
	5206025			Α.			1992-892673			
	J200023 [APPLN.]	T NIEO		А.	19930427		1989-6781	70	19920604 19890524	
FRIORIT	AFFLIN.	INFU.	•				1990-401369			
							1990-526726		19900522 1 19900522	
							1990-526726 1990-FR359		19900522	
7 D 7 T			. ــد				1990-FR359			

AB A lyophilized unit-dose pharmaceutical composition with improved solubility comprises an inclusion compound of active ingredients and cyclodextrin. A unit-dose lyophilized pharmaceutical composition contained ketoprofen 0.025, β -cyclodextrin 0.554, dextran 70 0.020, mannitol 0.100, aroma 0.030, and aspartame 0.010 g.

IT 136101-72-9

RL: BIOL (Biological study)

(lyophilized unit-dose pharmaceuticals containing)

RN 136101-72-9 HCAPLUS

CN β-Cyclodextrin, compd. with 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl 4-methyl-1-piperazinecarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 43200-80-2

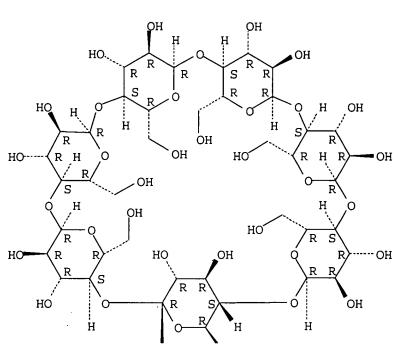
CMF C17 H17 C1 N6 O3

CM 2

CRN 7585-39-9 CMF C42 H70 O35

Absolute stereochemistry.

PAGE 1-A



PAGE 2-A

H OH

L8 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1991:12198 HCAPLUS

DOCUMENT NUMBER: 114:12198

TITLE: Granular pharmaceutical formulations

INVENTOR(S): Bola, Tarlok Singh
PATENT ASSIGNEE(S): May and Baker Ltd., UK
SOURCE: Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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EP	361910	A1	19900404	EP 1989-309867		19890928 <-	_
EP	361910	B1	19940629				
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FI	8904611	Α	19900331	FI 1989-4611		19890928 <-	-
ES	2058546	Т3	19941101	ES 1989-309867		19890928 <-	-
DK	8904816	Α	19900331	DK 1989-4816		19890929 <-	-
МО	8903893	Α	19900402	NO 1989-3893		19890929 <-	-
AU	8942416	A1	19900405	AU 1989-42416		19890929 <-	_
AU	623177	B2	19920507				
JP	02180813	A2	19900713	JP 1989-252477		19890929 <-	-
ZA	8907.440	Α	19900725	ZA 1989-7440		19890929 <-	-
HU	53282	A2	19901028	HU 1989-5129		19890929 <-	-
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US	5489439	Α	19960206	US 1993-203471		19931019 <-	_
PRIORITY	APPLN. INFO.:			GB 1988-23082	Α	19880930	
				GB 1989-7658	Α	19890405	
				US 1989-414259	B1	19890929	
				US 1992-895162	B1	19920605	
				US 1993-13487	B1	19930201	
λ D λ ∽	articulate drug				J		

AB A particulate drug is adsorbed to the surface of a spray-dried substrate such as sorbitol, and the product is incorporated into a molten excipient, followed, after cooling, by granulation. The granules may be coated. Ketoprofen (600 g) was mixed with 1860 g spray-dried sorbitol followed by the addition of 540 g stearic acid, heating, and cooling to give granules. The granules were coated with hydroxypropyl methyl cellulose.

IT **43200-80-2**, Zopiclone

RL: BIOL (Biological study)

(pharmaceutical granular formulations containing)

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

L8 ANSWER 22 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1981:156973 HCAPLUS

DOCUMENT NUMBER: 94:156973

TITLE: Heterocyclic compounds for pharmaceutical compositions

INVENTOR(S): Cotrel, Claude; Crisan, Cornel; Jeanmart, Claude;

Messer, Mayer N.

PATENT ASSIGNEE(S): Rhone-Poulenc Industries S. A., Fr.

SOURCE: U.S., 16 pp. Cont.-in-part of U.S. Ser. No. 628,926,

abandoned.
CODEN: USXXAM

DOCUMENT TYPE: Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4220646	A	19800902	US 1977-79080i	19770425 <
FR 2313060	A1	19761231	FR 1974-36963	
FR 2322600	A1	19770401	FR 1975-27160	19750904 <
FR 2322600	B1	19790914		
FR 2322601	A1	19770401	FR 1975-27161	19750904 <
FR 2322601	B1	19790914		
FR 2322602	A1	19770401	FR 1975-27162	19750904 <
FR 2322602	B1	19790914		
JP 51070776	A2	19760618	JP 1975-132198	19751105 <
ZA 7506954	Α	19761027	ZA 1975-6954	19751105 <
AU 7586331	A1	19770512	AU 1975-86331	19751105 <
AU 503200	B2	19790830 ·		
BE 835325	A1	19760506	BE 1975-161652	19751106 <
ES 442389	A1	19770416	ES 1975-442389	19751106 <
ES 442390	A1	19770416	ES 1975-442390	19751106 <
PL 100434	P	19781031	PL 1975-184578	19751107 <
JP 52033685	A2	19770314	JP 1976-1850	19760110 <
JP 61041919	B4	19860918		
AT 7704019	Α	19771015	AT 1977-4019	19770607 <
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CS 231958	B2	19850116	CS 1977-5983	19770914 <
CS 231959	B2	19850116	CS 1977-5984	19770914 <
JP 55040671	A2	19800322	JP 1979-105633	19790821 <
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PRIORITY APPLN. INFO.:			FR 1974-36963	A 19741107
			FR 1975-27160	A 19750904
			FR 1975-27161	A 19750904
			FR 1975-27162	A 19750904
			US 1975-628926	A2 19751105
		•		A 19741107
•			AT 1975-8486	A 19751107
			CS 1975-7510	A3 19751107
GI				

The heterocyclic compds. (.apprx.40) I (R1R2 together with the pyrroline ring form an isoindoline, a 2,3,6,7-tetrahydro-5H-1,4-oxathiino[2,3-c]pyrrole, or a 2,3,6,7-tetrahydro-5H-1,4-dithiino[2,3-c]pyrrole; R3 = H, C1-4 alkyl, C2-4 alkenyl, CF3; R4 = chloro-1,8-naphthyridin-2-yl), useful (no data) as tranquilizers, anticonvulsants, muscle relaxants, and hypnotics, were prepared Thus, acetylation of II (R = H) by AcCl gave II (R = Ac). Several pharmaceutical formulations were reported.

IT 59878-63-6

RL: RCT (Reactant); RACT (Reactant or reagent)

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ΙI

(acylation of)

RN 59878-63-6 HCAPLUS

CN 1-Piperazinecarboxylic acid, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

IT 59878-64-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

RN 59878-64-7 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-(1-oxo-2-propenyl)-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

L8 ANSWER 23 OF 23 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1973:492284 HCAPLUS

DOCUMENT NUMBER: 79:92284

TITLE: Anticonvulsive and tranquilizing pyrrolopyrazines

INVENTOR(S): Cotrel, Claude; Jeanmart, Claude; Messer, Mayer N.

PATENT ASSIGNEE(S): Rhone-Poulenc S. A. SOURCE: Ger. Offen., 18 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2300491	A1	19730719	DE 1973-2300491	19730105 <
DE 2300491	B2	19770908		

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	398503	C	19780406					
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	54124	C	19781010					
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	139359	C	19790709					
	507240	D	19760315	SU	1974-1993903		19740206 <-	
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PRIORITY	APPLN. INFO.:			FR	1972-505	Α	19720107	
				FR	1972-39731	Α	19721109	
~	- · · · · ·							

GI For diagram(s), see printed CA Issue.

AB Five pyrrolopyrazines (I; R = 3-O2NC6H4, 5-chloro-2-pyridyl, 6-methyl-3-pyridazinyl, or 7-chloro-2-quinolyl; n = 0 or 1), useful as tranquilizers and anticonvulsants, were prepared by reaction of II with YCl or successively with ClCO2Ph and 1-methylpiperazine, optionally followed by oxidation II were prepared by reaction of RNH2 with 2,3-pyrazinedicarboxylic anhydride, followed by ring closure, and KBH4 reduction of the resulting 5,7-dioxopyrrolopyrazine derivs.

IT 43200-80-2P 43200-96-0P

RN 43200-80-2 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

RN 43200-96-0 HCAPLUS

CN 1-Piperazinecarboxylic acid, 4-methyl-, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester, 4-oxide (9CI) (CA INDEX NAME)

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New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

- * The CA roles and document type information have been removed from * the IDE default display format and the ED field has been added, *
- * effective March 20, 2005. A new display format, IDERL, is now
- * available and contains the CA role and document type information.

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Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

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ring nodes :
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                               12
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                                             16 17 18 19 20 21
chain bonds :
5-11 6-23 9-26 14-27 19-24 23-24
                                  24-25
ring bonds :
1-2 1-7 2-3 3-4 4-8 5-6 5-9 6-7 7-8 8-9 10-11 10-15 11-12
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14-15 16-17
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exact/norm bonds :
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isolated ring systems :
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G1:0,N

10691628.trn

Match level :

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L9 STRUCTURE UPLOADED

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L9 HAS NO ANSWERS

L9STR

Structure attributes must be viewed using STN Express query preparation.

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2 ITERATIONS

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PROJECTED ANSWERS: O TO

10691628.trn Page 55 14:51

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FULL SCREEN SEARCH COMPLETED -

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55 ITERATIONS

SEARCH TIME: 00.00.01

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L1

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STRUCTURE UPLOADED

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L3 53 S L1 SSS FULL

FILE 'HCAPLUS' ENTERED AT 14:42:12 ON 30 OCT 2005

L4 571 S L3

L5 6 S L4 AND DISEASES L6 69 S L4 AND P/DT L7 44 S L6 AND US/PC L8 23 S L7 AND PY<=2002

FILE 'REGISTRY' ENTERED AT 14:47:11 ON 30 OCT 2005

L9 STRUCTURE UPLOADED

L10 0 S L9

L11 0 S L9 SSS FULL

=> FIL HCAPLUS

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)
SINCE FILE TOTAL

CA SUBSCRIBER PRICE ENTRY SESSION -21.17

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FILE COVERS 1907 - 30 Oct 2005 VOL 143 ISS 19

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=> FIL REGISTRY COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 2.45 489.90 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -21.17

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 OCT 2005 HIGHEST RN 866391-97-1 DICTIONARY FILE UPDATES: 28 OCT 2005 HIGHEST RN 866391-97-1

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TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Structure search iteration limits have been increased. See HELP SLIMITS for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10691628b.str

```
chain nodes :
23 24 25 26 27
ring nodes :
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
chain bonds :
5-11 6-23 9-26 14-27 19-24 23-24 24-25
ring bonds :
1-2 1-7 2-3 3-4 4-8 5-6 5-9 6-7 7-8 8-9 10-11 10-15 11-12 12-13 13-14
14-15 16-17 16-21 17-18 18-19 19-20 20-21
exact/norm bonds :
5-6 5-9 5-11 6-23 9-26 16-17 16-21 17-18 18-19 19-20 19-24 20-21 23-24
24-25
exact bonds :
6-7 8-9 14-27
normalized bonds :
1-2 1-7 2-3 3-4 4-8 7-8 10-11 10-15 11-12 12-13 13-14 14-15
isolated ring systems :
containing 1 : 10 : 16 :
```

G1:0,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS

14:51

L12 STRUCTURE UPLOADED

=> d 112 L12 HAS NO ANSWERS

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L12

STR

Structure attributes must be viewed using STN Express query preparation.

=> s 112

SAMPLE SEARCH INITIATED 14:50:31 FILE 'REGISTRY' SAMPLE SCREEN SEARCH COMPLETED -2 TO ITERATE

100.0% PROCESSED

2 ITERATIONS

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

2 TO 124

PROJECTED ANSWERS:

O TO

L13 0 SEA SSS SAM L12

=> s 112 sss full

FULL SEARCH INITIATED 14:50:38 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 55 TO ITERATE

100.0% PROCESSED

55 ITERATIONS

SEARCH TIME: 00.00.01

3 SEA SSS FUL L12

=> FIL HCAPLUS

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14:51



3 ANSWERS

COST IN U.S. DOLLARS SINCE FILE TOTAL **ENTRY** SESSION FULL ESTIMATED COST 161.33 651.23 DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL ENTRY SESSION CA SUBSCRIBER PRICE 0.00 -21.17

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=> s 114 L15

=> d l15 ibib abs hitstr tot

1 L14

L15 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2004:368899 HCAPLUS

DOCUMENT NUMBER: 140:380646

TITLE: Compositions comprising zopiclone derivatives

INVENTOR(S): Jerussi, Thomas P.; Fang, Qun K. PATENT ASSIGNEE(S): Seprecor, Inc., USA

PATENT ASSIGNEE(S): Sepracor, Inc., USA
SOURCE: PET Int. Appl., 47 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Facent English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT	NO.			KIN	D -	DATE		i	APPL:	I CAT	ION 1	NO.		D	ATE	
WO 2004 WO 2004				A2 A3		2004 2004		Ī	WO 2	003-1	JS34	105		2	0031	023
W :	GM, LS,	CR, HR, LT,	CU, HU, LU,	CZ, ID, LV,	DE, IL, MA,	AU, DK, IN, MD, RU,	DM, IS, MG,	DZ, JP, MK,	EC, KE, MN,	EE, KG, MW,	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NI,	GD, LC, NO,	GE, LK, NZ,	GH, LR, OM,

TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG US 2004147521 A1 20040729 US 2003-691628 20031024 PRIORITY APPLN. INFO.: US 2002-420740P P 20021024 OTHER SOURCE(S): MARPAT 140:380646

$$\begin{array}{c|c}
N & & & \\
R^2 &$$

AΒ The invention is directed to racemic and stereomerically pure zopiclone derivs. E.g., I was prepared Pharmacol. testing for hypnotic-sedative, anticonvulsant, myorelaxant, and anxiolytic activities was carried out. Pharmaceutical formulations were also given.

Ι

ΙT 685520-23-4P 685520-24-5P 685520-30-3P RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (compns. comprising zopiclone derivs.) RN 685520-23-4 HCAPLUS

CN 4-Morpholinecarboxylic acid, (5S)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN685520-24-5 HCAPLUS

4-Morpholinecarboxylic acid, (5R)-6-(5-chloro-2-pyridinyl)-6,7-dihydro-7oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

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Absolute stereochemistry.

RN 685520-30-3 HCAPLUS

CN 4-Morpholinecarboxylic acid, 6-(5-chloro-2-pyridinyl)-6,7-dihydro-7-oxo-5H-pyrrolo[3,4-b]pyrazin-5-yl ester (9CI) (CA INDEX NAME)

=> log y		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	7.39	658.62
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-0.73	-21.90

STN INTERNATIONAL LOGOFF AT 14:51:33 ON 30 OCT 2005